

RAW SEQUENCE LISTING ERROR REPORT

1652

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/697,186

Source: 1600
Date Processed by STIC: 2/22/2002

THE ATTA CHEEN TEN 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- Hand Carry directly to:
 U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
 - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/697,186
ATTN: NEW RULES CASE	s: Please disregard english "Alpha" Headers, which were inserted by Pto Softwar
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3 / Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence RulesPlease ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220> <223> section that some may be missing.
6Patentin 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220><223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to Include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s)missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.
	AMC/MH - Biotechnology Systems Branch - 08/21/2001

RAW SEQUENCE LISTING PATENT APPLICATION US/09/697,186 DATE: 02/22/2002 TIME: 14:56:40

Input Set: I697186.RAW

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

Does Not Comply Corrected Diskette Needed

<110> RIKEN 2 <120> A MUTANT KANAMYCIN NUCLEOTIDYLTRANSFERASE AND A METHOD OF SCREENING THERMOPHILIC BACTERIA USING THE SAME RECEIVED

MAR 1 2 2002

TECH CENTER 1600/2900 <130> PH-1082 pp 1-5 5 <140> US/09/697,186 6 <141> 2000-10-27 <150> JP 11-309616 <151> 29-OCT-1999 9 <160> 11 <170> PatentIn Ver. 2.0

ERRORED SEQUENCES FOLLOW

10

	11	<210>																	
	12	<211>																	
	13	<212>																	
	14	<213>	Art:	ifici	ial s	Seque	ence												
	15	<220>														-ion	into	. wil	d type KNT
	16	<223>	muta	anter	ızyme	e obt	caine	ed by	int	rodi	ictic	on or	poi	int II	iucai	,1011	11100	, w11	d type KNT
	17		gene	e of	Stap	phylo	ococo	cus a	ure	ıs aı	nd it	cs ex	cpres	35101	1				
	18	<400>	1							_	•		~ 7	-	37 - h	T	T1.	7707	•
	19		Met	Aşn	Gly	Pro	Ile			Thr	Arg	GIu	GIU	Arg	Met	Lys	TIE	vai	nisabered
E>	20		1	<u>(5</u>		10		1				_		~7	•	3	7707	T	nesabgred
	21		His	Glu	Ile	Lys	Glu	Arg	Ile	Leu	Asp	Lys	Tyr	GIY	Asp	Asp	Val	цуѕ	amend
	22					20					25			_,	-	30	D	m	acid
	23		Ala	Ile	Gly	Val	Tyr	Gly	Ser		GLY	Arg	GIn	Thr	Asp	Gly	PIO	TAT	lead
	24				35					40		_	_,	a 1	45	77.	~1. ,	Dho	humber
	25		Ser	Asp	Ile	Glu	Met	Met		Val	Met	ser	Thr	GIU	GIU	Ala	GIU	Phe	aird numbers (see 3 on Error Summary
	26			50					55	_			1	60	**- 3	7	Dha	III	(set 2
	27		Ser	His	Glu	Trp	Thr		Gly	Glu	Trp	Lys	vaı	GIU	vai	Asn	Pne	80	Jums
	28		65					70				_	75 ~1	**- 7	a 1	a	7 00		on Sand
	29		Ser	Glu	Glu	Ile		Leu	Asp	Tyr	Ala		Gin	vaı	GIU	ser	95	Trp	on cour
	30						85	_	_		_	90	•	D	-1 -	(Tla rac		Cor	Aumany
	31		Pro	Leu	Thr			Gln	Phe	Phe			ьeu	Pro	тте	171	Asp	Ser	10,7
	32					100			_	_	105			· •	a	110	<i>α</i> 1	777	Sheet 1
	33		Gly	Gly			Glu	, Lys	Val			Thr	Ата	ьуѕ	125	vai	GIU	Ala	,
	34				115			_		120		-	-1 -			~ 1	T 011	Dhe	
	35		Gln			His	Asp	Ala			Ата	Leu	TTE	val	GIU	GIU	пеп	Phe	
	36			130					135				**- 1	140	~1	Dro	Thr	Thr	
	37				Ala	Gly	Lys			Asn	тте	arg	val	GIN	GTĀ	PLO	1111	Thr 160	
	38		145					150		~7	3		155		C1	77-	Mo+	-	
	39		Phe	Leu	Pro	Ser	Leu	Thr	Val	Gin	val	Ата	Met	Ald	сту	Ата	MEC	Leu	

PAGE:	2					RAW PAT	SEÇ ENT	OUEN APP	CE LIC	LISI ATIC	ring ON U	; is/0	9/69	7,1	86				02/22/2002 14:56:40
														I	npu	Se	et:	I69'	7186.RAW
							165					170					175		
	40		T 10	C117	T.OU	цie	165 His	Δτα	Tle	Cvs			Thr	Ser	Ala	Ser	Val	Leu	
	41 42		TIE	GIY	пец	180	1115	9		-1-	185					190			
	43		Thr	Glu	Ala	Val	Lys	Gln	Ser	Asp	Leu	Pro	Ser	Gly	Tyr	Asp	His	Leu	
	44				195					200					205				
	45		Cys	Gln	Phe	Val	Met	Ser	Gly	Gln	Leu	Ser	Asp	Ser	Glu	Lys	Leu	Leu	
	46			210					215	_	~1	-1 -		220	Trn	Thr	G] 11	Δrα	
	47		Glu	Ser	Leu	Glu			Trp	Asn	GIĀ	TTE	Gln 235	GIU	rrp	TIIL	Giu	240	
	48		225			~ 1.		230	17a 1	Cor	Tare	Δτα		Pro	Phe				
	49		His	GIĀ	туr	TTE	245	Asp	vai	Ser	БуБ	250	Ile						
	50																		
	51	<210>	3				1	,	41		<i>(</i>	4	S (]	T c	Lari	nte	n	glo	rs.
	52	<211>				, d	elet	をこ	XX	se i	non	-// :			•		1	=	
	53	<212>			1	/				-				11.				, a	. 4 4
	54	<213>	Art:	ific:	ia 1 @	Seque	ence						T	Key	Co	مىن	r s	ene	YUL.
	55	<220> <223>		.6		61				ntrod	anct i	i and) oint	muta	tion	int	iw o:	.ld
	56 - -	<223>	muta	anu@	enky	uefeboi	e dta	nhv.	loco	ccus	aure	eus	and i	ts6	xpre	essio	n		
	57 58	<400>		S VW	Ten e	ne o.	L DCC	.p.r.y	1000	0045				V	-				
	59	(400)	Met	Lvs	Gly	Pro	Ile	Ile	Met	Thr	Arg	Glu	Glu	Arg	Met	Lys	Ile	Val	
	-60		1				5					10					15		
	61		His	Glu	Ile	Lys	Glu	Arg	Ile	Leu		Lys	Tyr	Gly	Asp	Asp	Val	Lys	
	62					20		_	_	_	25	•	03 -	mbss	7 an	30	Pro	Tur	
	63		Ala	Ile			Tyr	Gly	Ser		GIY	Arg	Gln	THE	45	Gry	FIO	- 7 -	
	64		_	-	35	a 1	Mot	Mot	Cvc	40 Val	Lou	Ser	Thr	Glu		Val	Glu	Phe	
	65 66		ser	Asp 50		GIU	Mec	Mec	55	(@@@	@@ @	@@60		nus	stig	red	hos	,	
E>	66 67		Ser	Tvr	Glu	Trp	Thr	Thr	Gly	Glu	Trp	Lys	Ala						
	68		65					70					75					80	
	69		Ser	Glu	Glu	Ile	Leu	Leu	Asp	Tyr	Ala	Ser	Arg	Val	Glu	Pro	Asp	Trp	
	70											90		-	- 1-	M=	95	Dro	
	71		Pro	Leu	Thr			Arg	Phe	Phe	Ser	IIe	Leu	Pro	тте	110	Asp	FIO	
	72		~ 7	~7		100	~ 1	T~	77-7	Тчт	105 Gln		Ala	Lvs	Ser		Glu	Ala	
	73		GLY	GLY	Tyr 115		GIU	пλр	val	120					125				
	74 75		Gln	LVS	TIS Phe	His	Asp	Ala	Ile			Leu	Ile	Val	Glu	Glu	Leu	Phe	
	75 76			130	·				135	;				140					
	77		Glu	Tyr	Ala	Gly	Lys	Trp	Arg	Asn	Ile	Arg	Val	Gln	Gly	Pro	Thr	Thr	
	78		145					150)				155					100	
	79		Phe	Lev	Pro	Ser			· Val	. Gln	. Val	Ala	Met	АТА	. сту	AId	мес 175	ησu	
	80				_ •		165	N~	, Tla		Ф. 17	170 Thr	Thr	Ser	Ala	Ser			
	81		Il€	g GLy	, rer	1 H1S		Arg	, 116	- cys	185			201		190			
	82 83		ጥኮ ፣	راي -	: או	Tot Yal	, Lvs	Glr	ı Pro	Ast			Pro	Gly	Tyr	Val	Gln	Leu	•
	83 84				199	5				200)				205				
	85		Cys	Glr	ı Lei	ı Val	. Met	Ser	Gly	/ Glm	Lev	ı Ser	Asp	Pro	Glu	Lys	Leu	Leu	
	86			210)				215	5				220)				
	87		Glı	ı Sei	c Le	ı Glu	ı Ası			Asn	Gly	v Val	Gln	Glu	Trp	Ala	GLU	240	
	88		225	5				230)				235	•				2.10	

RAW SEQUENCE LISTING PATENT APPLICATION US/09/697,186 DATE: 02/22/2002 TIME: 14:56:40

	89		His	Gly	Tyr	Ile		Asp	Val	Ser	Lys	Arg 250	Ile	Pro	Phe				
	90						245					250							
	91	<210>	10					~										<i>*</i>	
E>	92	<211>					1.	lite	/										L
	93	<212>				1	JU.										1/	110	11 T
	94	<213>		ohvl	ococ	71						, 6				. /	\mathcal{N}		ut eturn,
	95	<220>	_	1						N	0	4				Ι.	Δ.Δ.	1 1	okurn
	96	<221>								N	ון שנו					110	N V G	\ Y 1	
	97	<222>		(7	59)					//	<i>-</i> ;-								L
	98	<400>		•	•														U .
E>	99		gtg	aat	gga	cca	ata	ata	atg	act	aga	gaa	gaa	aga	atg	aag	att	gtt	48 Met
W>	100								_										
	101		Gly	Pro	Ile	Ile	Met	Thr	Arg	Glu	Glu	Arg	Met	Lys	Ile				/
W>	102		1				5					10					15		J.
E>	103		cat	gaa	att	aag	gaa	cga	ata	ttg	gat	aaa	tat	ggg	gat	gat	gtt	aag	96 His
W>	104																		
	105		Ile	Lys	Glu	Arg	Ile	Leu	Asp	Lys	Tyr	Gly	Asp	Asp	Val				1
W>	106					20					25					30			V
E>	107		gct	att	ggt	gtt	tat	ggc	tct	ctt	ggt	cgt	cag	act	gat	ggg	CCC	tat	144 Ala
W>	108																		
	109		Gly	Val	Tyr	Gly	Ser	Leu	Gly	Arg	Gln	Thr	Asp	Gly					į
	110				35					40					45				<i>W</i>
E>	111		tcg	gat	att	gag	atg	atg	tgt	gtc	atg	tca	aca	gag	gaa	gca	gag	ttc	192 Ser
W>	112											_	_	_	_				
	113		Ile	Glu	Met	Met	Cys	Val		Ser	Thr	Glu	Glu		Glu				ſ
	114			50				•	55					60					240.00
E>	115		agc	cat	gaa	tgg	aca	acc	ggt	gag	tgg	aag	gtg	gaa	gtg	aat	ttt	gat	240 Ser
W>	116		_		_	_		=	_	_				_	51. .				
	117			_	Thr	Thr	Gly		Trp	Lys	Vai	Glu		Asn	Pne			0.0	Ĵ
W>	118		65					70					75					80	200 50*
E>	119		agc	gaa	gag	att	cta	cta	gat	tat	gca	tCt	cag	gtg	gaa	tca	gat	tgg	288 Ser
W>	120				_		•			G	71 -	17 7	a1	0.00	7 ~~				
	121		Glu	тте	ьeu	ьeu		Tyr	Ala	ser	GIII	Val 90	GIU	261	Asp		95		1/1
W>	122						85						++~		a++	+=+			336 Pro
E>	123		ccg	CEE	aca	cat	ggt	caa	נננ	LLC	LUL	all	LLY	ccg	acc	Lat	gat	tca	330 110
W>	124		mb sc	ui a	C1.,	Cln	Dho	Dho	gor	Tla	T.011	Pro	т1Б	Туг	Δαη				1
	125		THE	HIS	СТУ	100		PIIE	SET	116	105	FIO	116	1 7 1	ASP	110			\checkmark
10 %	126 127		aat	~ ~~	+ = 0			222	ata	tat		act	act	aaa	t.ca			gcc	384 Gly
E>	127		ggt	yya	Lac	LLA	gag	aaa	9-9	cuc		400	900		5	3	9	3	
W>	129		Tur	T.011	Glu	Lvs	Va1	Tvr	Gln	Thr	Ala	Lys	Ser	Val	Glu				,
	130		TYL	пец	115	_	var	- 7 -	0111	120		<i>1</i>			125				\mathcal{L}
E>	131		caa	aco			gat	aca	att		gee.	ctt	atc	qta		gag	cta	ttt	432 Gln
M>	132		Çad	ucg		-40	340	203		-3-	5-5			J	J	J-3	3	. = =	
M>	133		Phe	Hig	Asn	Αla	Ile	Cvs	Ala	Leu	Ile	Val	Glu	Glu	Leu				ſ
	134		- 110	130				-,-	135					140					L
E>	135		даа			gge	aaa	taa			att	cat	qta		gga	cca	aca	aca	480 Glu
₩>	136		544		- Ju	220		-33	- 3 -			- 3 -	J - J						
,, -/	137		Ala	Glv	Lvs	Trp	Ara	Asn	Ile	Ara	Val	Gln	Glv	Pro	Thr				
	23,			1	_1 5		3			- 3			- 4						

DATE: 02/22/2002 RAW SEQUENCE LISTING PAGE: TIME: 14:56:40 PATENT APPLICATION US/09/697,186 Input Set: 1697186.RAW 160 155 150 138 W--> ttt cta cca tcc ttg act gta cag gta gca atg gca ggt gcc atg ttg 528 Phe 139 E--> 140 Pro Ser Leu Thr Val Gln Val Ala Met Ala Gly Ala Met 141 170 142 W--> att ggt ctg cat cat cgc atc tgt tat acg acg agc gct tcg gtc tta 576 Ile 143 E--> W--> Leu His His Arg Ile Cys Tyr Thr Thr Ser Ala Ser Val 145 190 146 act gaa gca gtt aag caa tca gat ctt cct tca ggt tat gac cat ctg 624 Thr 147 E--> 148 W--> Ala Val Lys Gln Ser Asp Leu Pro Ser Gly Tyr Asp His 149 150 tgc cag ttc gta atg tct ggt caa ctt tcc gac tct gag aaa ctt ctg 672 Cys E--> 151 152 W--> Phe Val Met Ser Gly Gln Leu Ser Asp Ser Glu Lys Leu 153 154 gaa tcg cta gag aat ttc tgg aat ggg att cag gag tgg aca gaa cga 720 Glu E--> 155 156 W--> Leu Glu Asn Phe Trp Asn Gly Ile Gln Glu Trp Thr Glu 157 240 225 158 W--> 759 His cac gga tat ata gtg gat gtg tca aaa cgc ata cca ttt 159 160 W--> Tyr Ile Val Asp Val Ser Lys Arg Ile Pro 161 7 Please ensure 253 amis acids are shown in this sequence. 162 W--> 163 see p.5 164 E--> 165 <212> PRT <213> Staphylococcus@aureus 166 167 <400> 11 Met Asn Gly Pro Ile Ile Met Thr Arg Glu Glu Arg Met Lys Ile 168 169 His Glu Ile Lys Glu Arg Ile Leu Asp Lys Tyr Gly Asp Asp Val 170 171 Ala Ile Gly Val Tyr Gly Ser Leu Gly Arg Gln Thr Asp Gly Pro 172 173 Ser Asp Ile Glu Met Met Cys Val Met Ser Thr Glu Glu Ala Glu 174 175 Ser His Glu Trp Thr Thr Gly Glu Trp Lys Val Glu Val Asn Phe 176 177 Ser Glu Glu Ile Leu Leu Asp Tyr Ala Ser Gln Val Glu Ser Asp 178 90 179 Pro Leu Thr His Gly Gln Phe Phe Ser Ile Leu Pro Ile Tyr Asp 180 105 181 Gly Gly Tyr Leu Glu Lys Val Tyr Gln Thr Ala Lys Ser Val Glu 182 183 Gln Thr Phe His Asp Ala Ile Cys Ala Leu Ile Val Glu Glu Leu 184 135 185

Glu Tyr Ala Gly Lys Trp Arg Asn Ile Arg Val Gln Gly Pro Thr

186

PAGE:	5	RAW SEQUENCE LISTING PATENT APPLICATION US/09/697,186 DATE: 02/22/2002 TIME: 14:56:40
		Input Set: I697186.RAW
E>	187 188 189 190 191 192 193 194 195 196 197 198 199 200 201	145
E>	201	in dalite

VERIFICATION SUMMARYDATE: 02/22/2002PATENT APPLICATION US/09/697,186TIME: 14:56:40

20 E Invalid/Missing Amino Acid Numbering 1 5 10 15 66 E Invalid/Missing Amino Acid Numbering 50 55 @@ 92 E Input 759, Calc# Bases 0 differ <211> 759 99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	9000 00060
66 E Invalid/Missing Amino Acid Numbering 50 55 @@ 92 E Input 759, Calc# Bases 0 differ <211> 759	@@@@ @@@60
92 E Input 759, Calc# Bases 0 differ <211> 759	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
	ct aga gaa g
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	ct aga gaa g
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	ct aga gaa g
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	ct aga gaa g
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	ct aga gaa g
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	ct aga gaa g
99 E Wrong Amino Acid Designator gtg aat gga cca ata ata atg ac	ct aga gaa g
100 W Invalid/Missing Amino Acid Numbering	
102 W Invalid/Missing Amino Acid Numbering 1 5	10
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	tg gat aaa t
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	tg gat aaa t
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	tg gat aaa t
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	
103 E Wrong Amino Acid Designator cat gaa att aag gaa cga ata tt	tg gat aaa t
104 W Invalid/Missing Amino Acid Numbering	
106 W Invalid/Missing Amino Acid Numbering 20	25
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	
107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ct	tt ggt cgt c

107 E Wrong Amino Acid Designator 107 E Wrong Amino Acid Designator 107 E Wrong Amino Acid Designator gct att ggt gtt tat ggc tct ctt ggt cgt c gct att ggt gtt tat ggc tct ctt ggt cgt c gct att ggt gtt tat ggc tct ctt ggt cgt c

7

VERIFICATION SUMMARY PATENT APPLICATION US/09/697,186

DATE: 02/22/2002 TIME: 14:56:40

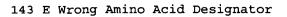
Line	?	Error/Warning	Orig	ginal	тех	t	. 	. -					_
108	- TAT	Invalid/Missing Amino Acid Numbering											
		Wrong Amino Acid Designator	tcg	gat	att	gag	atg	atg	tgt	gtc	atg	tca	a
		Wrong Amino Acid Designator	tcg	gat	att	gag	atg	atg	tgt	gtc	atg	tca	a
		Wrong Amino Acid Designator	tcg	gat	att	gag	atg	atg	tgt	gtc	atg	tca	a
		Wrong Amino Acid Designator		gat									
		Wrong Amino Acid Designator		gat									
111	E	Wrong Amino Acid Designator		gat									
111	E	Wrong Amino Acid Designator		gat									
111	E	Wrong Amino Acid Designator		gat									
111	E	Wrong Amino Acid Designator		gat									
111	E	Wrong Amino Acid Designator		gat									
111	E	Wrong Amino Acid Designator		gat									
111	E	Wrong Amino Acid Designator		gat									
		Wrong Amino Acid Designator		gat									
		Wrong Amino Acid Designator		gat									
		Wrong Amino Acid Designator		gat									
		Wrong Amino Acid Designator	tcg	gat	att	gag	atg	atg	tgt	gtc	atg	tca	a
		Invalid/Missing Amino Acid Numbering									L		~
		Wrong Amino Acid Designator	-	cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator	_	cat									
		Wrong Amino Acid Designator		cat cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator	_	cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator Wrong Amino Acid Designator	_	cat	_								
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator		cat									
		Wrong Amino Acid Designator		cat									
		Invalid/Missing Amino Acid Numbering	_		•								
		Invalid/Missing Amino Acid Numbering	65					70					
		Wrong Amino Acid Designator	agc	gaa	gag	att	cta	cta	gat	tat	gca	tct	С
		Wrong Amino Acid Designator	agc	gaa	gag	att	cta	cta	gat	tat	gca	tct	С
		Wrong Amino Acid Designator		gaa									
119	E	Wrong Amino Acid Designator		gaa									
119	E	Wrong Amino Acid Designator		gaa									
119	E	Wrong Amino Acid Designator		gaa									
119	E	Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
		Wrong Amino Acid Designator		gaa									
119	Ε	Wrong Amino Acid Designator	agc	gaa	gag	att	cta	CLA	yat	ıai	yea		U

VERIFICATION SUMMARYDATE: 02/22/2002PATENT APPLICATION US/09/697,186TIME: 14:56:40

Line	?	Error/Warning	Original Text	
	-			-
		Invalid/Missing Amino Acid Numbering		
		Invalid/Missing Amino Acid Numbering	85 90	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Wrong Amino Acid Designator	ccg ctt aca cat ggt caa ttt ttc tct att	
		Invalid/Missing Amino Acid Numbering	ceg eee aca cae gge caa eee eee eee ace	_
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	α
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	
		Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	g
127	E	Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	g
127	E	Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	g
127	E	Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	g
127	E	Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	g
127	E	Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	g
127	E	Wrong Amino Acid Designator	ggt gga tac tta gag aaa gtg tat caa act	g
128	W	Invalid/Missing Amino Acid Numbering		
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
		Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	
131	E	Wrong Amino Acid Designator	caa acg ttc cac gat gcg att tgt gcc ctt	a
		•		

VERIFICATION SUMMARYDATE: 02/22/2002PATENT APPLICATION US/09/697,186TIME: 14:56:40

Line	?	Error/Warning	Orig	jinal	. Tex	t							
132	- W	Invalid/Missing Amino Acid Numbering											
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator								aat			
135	E	Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator	gaa	tat	gca	ggc	aaa	tgg	cgt	aat	att	cgt	g
		Wrong Amino Acid Designator	gaa	tat	gca	ggc	aaa	tgg	cgt	aat	att	cgt	g
		Wrong Amino Acid Designator	gaa	tat	gca	ggc	aaa	tgg	cgt	aat	att	cgt	g
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator								aat			
		Wrong Amino Acid Designator	gaa	tat	gca	ggc	aaa	tgg	cgt	aat	att	cgt	g
		Wrong Amino Acid Designator	gaa	tat	gca	ggc	aaa	tgg	cgt	aat	att	cgt	g
		Wrong Amino Acid Designator	gaa	tat	gca	ggc	aaa	tgg	cgt	aat	att	cgt	g
		Invalid/Missing Amino Acid Numbering											
		Invalid/Missing Amino Acid Numbering	145					150					1
		Wrong Amino Acid Designator	ttt	cta	cca	tcc	ttg	act	gta	cag	gta	gca	a
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator	ttt	cta	cca	tcc	ttg	act	gta	cag	gta	gca	a
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator	ttt	cta	cca	tcc	ttg	act	gta	cag	gta	gca	a
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator	ttt	cta	cca	tcc	ttg	act	gta	cag	gta	gca	a
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator	ttt	cta	cca	tcc	ttg	act	gta	cag	gta	gca	a
		Wrong Amino Acid Designator								cag			
		Wrong Amino Acid Designator								cag			
139	E	Wrong Amino Acid Designator								cag			
139	E	Wrong Amino Acid Designator	ttt	cta	cca	tcc	ttg	act	gta	cag	gta	gca	a
140	W	Invalid/Missing Amino Acid Numbering											
142	W	Invalid/Missing Amino Acid Numbering					165					170	
143	E	Wrong Amino Acid Designator								tgt			
143	E	Wrong Amino Acid Designator								tgt			
143	E	Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator								tgt			
143	E	Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator								tgt			
143	E	Wrong Amino Acid Designator								tgt			
143	E	Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator								tgt			
		Wrong Amino Acid Designator	att	ggt	ctg	cat	cat	cgc	atc	tgt	tat	acg	a
143	E	Wrong Amino Acid Designator	att	ggt	ctg	cat	cat	cgc	atc	tgt	tat	acg	a



att ggt ctg cat cat cgc atc tgt tat acg a

VERIFICATION SUMMARYDATE: 02/22/2002PATENT APPLICATION US/09/697,186DATE: 02/22/2002TIME: 14:56:40

Line	?	Error/War	ninç	3				c	rig	jina:	l Tex	ct							
144	- TaT	Invalid/M	idaa.	ing A	mino Aci	d Num	hering			· - ·									
		Wrong Ami					wering	ē	ct	σаа	gca	att	aaσ	caa	tca	gat	ctt	cct	t
		Wrong Ami									gca								
		Wrong Ami			_						gca								
		Wrong Ami			_						gca								
		Wrong Ami			_						gca								
		Wrong Ami			_						gca								
		Wrong Ami			=						gca								
		Wrong Ami									gca								
		Wrong Ami			_						gca								
		Wrong Ami			-						gca								
		Wrong Ami			-						gca								
		Wrong Ami									gca								
		Wrong Ami									gca								
		Wrong Ami									gca								
		Wrong Ami			-						gca								
		Wrong Ami			_						gca								
		Invalid/M			_		bering			J .	,	-	•			_			
		Wrong Ami		_				t	ac	caq	ttc	qta	atq	tct	ggt	caa	ctt	tcc	g
		Wrong Ami			_				_	_	ttc	_	-						
		Wrong Ami			_						ttc								
		Wrong Ami									ttc								
		Wrong Ami			-						ttc								
		Wrong Ami			_						ttc								
		Wrong Ami			_						ttc								
		Wrong Ami							_		ttc								
		Wrong Ami			_				_	_	ttc	-	_						
		Wrong Ami			_				_	_	ttc	_	-		-				
		Wrong Ami									ttc								
		Wrong Ami			_				-		ttc								
		Wrong Ami			-				_	_	ttc	_	_		-				
		Wrong Ami									ttc								
		Wrong Ami			-						ttc								
		Wrong Ami									ttc								
		Invalid/M			_		bering		_			-							
		Wrong Ami					_	ç	jaa	tcg	cta	gag	aat	ttc	tgg	aat	ggg	att	С
		Wrong Ami			_						cta								
		Wrong Ami									cta								
		Wrong Ami									cta								
		Wrong Ami			_						cta								
		Wrong Ami			_						cta								
		Wrong Ami									cta								
155	E	Wrong Ami	.no i	Acid	Designat	or		ç	gaa	tcg	cta	gag	aat	ttc	tgg	aat	ggg	att	С
		Wrong Ami									cta								
		Wrong Ami									cta								
		Wrong Ami			_			ç	jaa	tcg	cta	gag	aat	ttc	tgg	aat	ggg	att	С
		Wrong Ami									cta								
		Wrong Ami						ç	jaa	tcg	cta	gag	aat	ttc	tgg	aat	ggg	att	C
		Wrong Ami						ç	gaa	tcg	cta	gag	aat	ttc	tgg	aat	ggg	att	C
		Wrong Ami									cta								
		Wrong Ami						ç	gaa	tcg	cta	gag	aat	ttc	tgg	aat	ggg	att	С
		•																	

VERIFICATION SUMMARY
PATENT APPLICATION US/09/697,186

DATE: 02/22/2002 TIME: 14:56:40

Line	?	Error/Warning	Orig	gina	l Tex	κt							_
	-												
		Invalid/Missing Amino Acid Numbering											_
158	W	Invalid/Missing Amino Acid Numbering	225					230					2
159	E	Wrong Amino Acid Designator									aaa		
159	E	Wrong Amino Acid Designator	cac	gga	tat	ata	gtg	gat	gtg	tca	aaa	cgc	a
159	E	Wrong Amino Acid Designator									aaa		
		Wrong Amino Acid Designator									aaa		
		Wrong Amino Acid Designator									aaa		
		Wrong Amino Acid Designator									aaa		
		Wrong Amino Acid Designator	cac	gga	tat	ata	gtg	gat	gtg	tca	aaa	cgc	а
		Wrong Amino Acid Designator	cac	gga	tat	ata	gtg	gat	gtg	tca	aaa	cgc	а
		Wrong Amino Acid Designator	cac	gga	tat	ata	gtg	gat	gtg	tca	aaa	cgc	а
		Wrong Amino Acid Designator	cac	gga	tat	ata	gtg	gat	gtg	tca	aaa	cgc	а
		Wrong Amino Acid Designator									aaa		
		Wrong Amino Acid Designator									aaa		
		Wrong Amino Acid Designator									aaa		
		Invalid/Missing Amino Acid Numbering	ouo	55~	-		J - J	J.	, ,			_	
							245					250	
		Invalid/Missing Amino Acid Numbering	-01	1>	253		213						
		Input 253, Calc Seq.Length 254 differ			255								
		Wrong Amino Acid Designator	@@@										
201	\mathbf{E}	Invalid/Missing Amino Acid Numbering	1/1	4									